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IN THE SPECIFICATION

Please replace paragraph [0004] of the published application with the following paragraph:

- - [0004] Attempts to create a device for generating high voltage pulses of short duration have resulted in several patents. One of the first patents on this topic, issued on Jun. 5, 1951 to R. L. Alty as U.S. Pat. No. 2,555,305, teaches the use of a transmitter as a load, driven by a pulse generating circuit consisting of an inductor, a capacitor and a switch. Several other patents have issued since Alty's, with modifications on his basic idea. One such patent is U.S. Pat. No. 3,579,111 issued to Johannessen ~~Lexington~~ et al on May 18, 1971. This more recent patent uses a charging inductor connected through a charging switch to a source of direct current energy. The capacitor of an RF tank circuit cooperates with the charging inductor to achieve resonance. A power switch allows the charged tank circuit to oscillate at its natural frequency through a load connected in series. U.S. Pat. No. 4,491,842 issued on Jan. 1, 1985 to Gripshover et al shows yet another approach to generating high peak power, broadband radio frequency pulses. In this case, the generator is constructed with looped pairs of coaxial cables connected by spark gap switches. Square wave pulses are produced at a high pulse repetition frequency. An antenna is provided as a matched impedance load, connected by each half of the looped coaxial cables. - -

Please replace paragraph [0020] of the published application with the following paragraph:

- - [0020] When the switch is closed, the energy stored in C_G 14 is transferred to the main delay line, T_D 12. The value of the output impedance of the generator, R_G 22 determines how much power the delay line will receive. As R_G decreases, the power transferred to the delay line increases, leading to the ideal case for maximum power transfer occurring with an R_G of zero. The energy transferred into the main delay line reflects from both ends of the delay line, creating an oscillatory voltage waveform, shown in FIG. 2, Frame A, 32. Frame B, 34, shows that the current waveform is relatively smooth. Frame C [[3]], 36, shows the results of a Fast Fourier Transform (FFT) of the voltage waveform. Two basic frequencies are produced by the circuit of FIG. 1, f_1 38 at 1 MHz and f_2 40 at 83.33 MHz with two harmonics 42 and 44. The frequency of interest, f_2, is directly related to the time delay, T_D through the following equation;

$$f_2 = \frac{1}{2T_D} \qquad (1)$$

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Please replace paragraph [0023] of the published application with the following paragraph:

- - [0023] In one embodiment, the antenna/trap is represented as a resistor ~~load~~, R_A 48. The trap enhances the available power by an order of magnitude since the low-impedance generator delay line acts as an additional reservoir of energy that feeds the energy from the generator into

the oscillatory circuit. The main frequency of oscillation also decreases from 83.33 MHz to 49 MHz, as shown in the FFT results of FIG. 4, Frame B. - -

Please replace paragraph [0024] of the published application with the following paragraph:

- - [0024] In one embodiment, the main delay line ~~of the generator~~ is removed and a capacitive load C, represented by plate 54, is attached between points 50 and 52 in FIG. 3. This added capacitance behaves as a reservoir of energy that enhances the value of the total power available in the oscillatory circuit. FIG. 4, Frame D shows the main frequency of oscillation also decreases to 49 MHz when the capacitor C is added. - -

Please replace paragraph [0025] of the published application with the following paragraph:

- - [0025] The device can additionally be modified by adding an antenna, represented by plate 54 at the free end of the main delay line, at point 55, shown in FIG. 3. Due to capacitive coupling between the antenna and the quarter-wave trap, this system is better able to radiate lower frequencies. The extra antenna also boosts the total emitted power by an order of magnitude. - -